

[illegible]

Francois PINIER

Appln. No.: Not yet assigned

Filed: December 22, 2000

For: ROBUST CAS DETECTION METHOD

Assistant Commissioner for Patents
Washington, D.C. 20231

Prior to examination, please amend the above-identified application as follows:

Page 1, after the title insert the heading --**Background of the Invention**

The present invention relates to a method of detection of a predefined signaling signal sent via an analog telecommunications line, to a computer product comprising computer program code means, to a telecommunications device, and to a predefined signaling signal detector to be connected to an input coupled to an analog telecommunications line.

paragraph beginning at line 6, please amend as follows:

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This object is attained, according to the invention, by a method of detection of predefined signaling signal, a computer product, a telecommunications device and a predefined signaling signal detector, all as described below.

Page 7, after line 6, insert the heading --**Brief Description of the Drawings**--.

after line 16, insert the heading --**Detailed Description of the Invention**--.

IN THE CLAIMS

7. (Amended) A telecommunications device comprising an input coupled to an analog telephone line for receiving analog telecommunications signals, and a predefined signaling signal detector connected to said input to detect a predefined signaling signal sent via said analog telecommunications line wherein said predefined signaling signal detector (1) contains:

a Fourier transform circuit applying a Fourier transform FT over said analog telecommunications signals on successive time intervals while at least one of said time interval overlaps at least partially over the next one, said Fourier transform circuit averaging said FT over several time intervals, obtaining an averaged spectral function, and

an analyzing circuit analyzing said averaged spectral function for the detection of the possible presence of the said predefined signaling signal.

8. (Amended) A telecommunications device according to claim 7, characterized in that said Fourier transform circuit while applying the said FT uses a function of specific form defining a window for the considered values of the amplitude of said analog telecommunications signals.

9. (Amended) A telecommunications device according to claim 8, characterized in that said window has a rectangular shape.

10. (Amended) A telecommunications device according to claim 8, characterized in that said window is a Blackman window.

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11. (Amended) A telecommunications device according to claim 7, characterized in that said analyzing circuit applies a comparison procedure between the amplitude of said averaged spectral function at the frequency range where said predefined signaling signal shall be expected and a typical value for the noise won out of said averaged spectral function.

12. (Amended) A telecommunications device according to claim 7, characterized in that at least part of the Fourier transform and analyzing circuits comprise a processor of the said predefined signaling signal detector (1).

13. (Amended) A telecommunications device according to claim 12, characterized in that it contains a computer readable medium having a program recorded thereon, said computer readable medium comprising computer program code adapted to perform at least parts of the steps of claim 1 when said program is run on said processor.

14. (Amended) A telecommunications device according to claim 7, characterized in that said predefined signaling signal detector (1) is a calling alerting signal CAS detector.

15. (Amended) A predefined signaling signal detector (1) to be connected to an input (2) coupled to an analog telecommunications line for receiving analog telecommunications signals, to detect a predefined signaling signal sent via said analog telecommunications line, said predefined signaling signal detector comprises a telecommunications device as set forth in claim 7.

IN THE ABSTRACT:

After the heading, delete the title in its entirety.

After the abstract, delete "(Figure 1)".

[illegible]

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

Page 1, first paragraph, please amend as follows:

The present invention relates to a method of detection of a predefined signaling signal sent via an analog telecommunications line [as set forth in the preamble of claim 1], to a computer product comprising computer program code means, to a telecommunications device [as set forth in the preamble of claim 7], and to a predefined signaling signal detector to be connected to an input coupled to an analog telecommunications line.

Page 4, paragraph beginning at line 6, please amend as follows:

This object is attained, according to the invention, by a method of detection of predefined signaling signal [as claimed in claim 1 and], a computer product, a telecommunications device and a predefined signaling signal detector [as claimed in claim 6, 7 and 15 respectively], all as described below.

IN THE CLAIMS:

The claims are amended as follows:

7. (Amended) [Telecommunications] A telecommunications device comprising an input [(2)] coupled to an analog telephone line for receiving analog telecommunications signals, and a predefined signaling signal detector [(1)] connected to said input to detect a predefined signaling signal sent via said analog telecommunications line [characterized in that] wherein said predefined signaling signal detector (1) contains:

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13. (Amended) [Telecommunications] A telecommunications device according to claim 12, characterized in that it contains a computer readable medium having a program recorded thereon, said computer readable medium comprising computer program code [means] adapted to perform at least parts of the steps of claim 1 when said program is run on said processor.

14. (Amended) [Telecommunications] A telecommunications device according to claim 7, characterized in that said predefined signaling signal detector (1) is a calling alerting signal CAS detector.

15. (Amended) [Predefined] A predefined signaling signal detector (1) to be connected to an input (2) coupled to an analog telecommunications line for receiving analog telecommunications signals, to detect a predefined signaling signal sent via said analog telecommunications line, [while] said predefined signaling signal detector [(1) is composed of means] comprises a telecommunications device as set forth in claim 7.